

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An information processing apparatus for connecting to a network to which a ~~plurality~~ plurality of devices are connected, and executing a process of generating an access control list, ~~characterized by~~ comprising:

a reception unit for receiving a packet from a client that serves as an access requesting apparatus through the network;

a storage unit storing a MAC list in which information ~~of a MAC list~~ for one client is set as registration data for one slot, the MAC list being composed of a pre-determined number of slots that define a corresponding predetermined number of clients that are granted permission to access the information processing apparatus;

a registration permission judgment unit for confirming whether or not there is an empty slot in the MAC list and judging ~~[[as]]~~ that a registration is permitted only if there is the empty slot in the MAC list, in a client registration process based on a received packet at the reception unit; and

a registration processing unit for acquiring data containing a client MAC address from the received packet and executing a registration process for the MAC list, in accordance with a judgment of the registration permission by the registration permission judgment unit.

Claim 2 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized in that:~~ wherein

the registration processing unit is configured to acquire a sender MAC address contained in a header field of the packet received from the client and adopts the acquired sender MAC address as registration information of the MAC list.

Claim 3 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized by~~ further comprising:

a packet analysis unit for judging whether the packet received from the client is a registration processing request packet or a data processing request packet; ~~and~~ wherein
~~characterized in that:~~

if the packet received from the client is the registration processing request packet, the registration permission judgment unit executes a registration permission judgment process in accordance with a presence/absence detection process for the empty slot in the MAC address[[]], and

the registration processing unit executes a registration process in accordance with the judgment of the registration permission by the registration permission judgment unit.

Claim 4 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized in that:~~ wherein

if the packet received from the client is the data processing packet, the registration permission judgment unit executes the registration permission judgment process in accordance with the presence/absence detection process for the empty slot in the MAC address[[]], and

the registration processing unit executes the registration process for the MAC list in accordance with the judgment of the registration permission by the registration permission judgment unit, by acquiring the data containing the client MAC address from the received data processing request packet.

Claim 5 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized by~~ further comprising:

a control unit for executing a close process for the empty slot under a condition that a lapse time from a setting process for the empty slot in the MAC list exceeds a predetermined threshold time.

Claim 6 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized in that:~~ wherein

the registration permission judgment unit is ~~configured~~ configured to execute a process of judging whether or not a data processing request sequence from the client correctly and reliably executes a sequence in conformity with a UPnP protocol[[;]], and

the registration processing unit is configured to execute the registration process for the MAC list in accordance with a judgment that the data processing request sequence from the client correctly and reliably executes the sequence in conformity with a UPnP protocol, by acquiring the data containing the client MAC address from the received data processing request packet.

Claim 7 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized in that:~~ wherein

the registration permission judgment unit judges whether a content directory service (CDS) request process in the sequence in conformity with the UPnP protocol is executed or not in response to a data processing request from the client[[;]], and

the registration processing unit is configured to execute the registration process for the MAC list in accordance with a judgment that the content directory service (CDS) request process is executed, by acquiring the data containing the client MAC address from the received data processing request packet.

Claim 8 (Currently Amended): The information processing apparatus according to claim 1, ~~characterized in that:~~ wherein

the registration processing unit is configured to execute the registration process for the MAC list by acquiring the MAC address and identification information different from the MAC address stored in the packet received from the client.

Claim 9 (Currently Amended): The information processing apparatus according to claim 8, ~~characterized in that:~~ wherein

the identification information different from the MAC address is identification information of global unique ID information or key information set to a client apparatus.

Claim 10-12 (Canceled).

Claim 13 (Currently Amended): A server client system ~~including a server~~ for connecting to a network to which a ~~plaurity~~ plurality of devices are connected and receiving an access request, ~~and a client for executing the access request, characterized in that~~ comprising:

[[the]] a client [[is]] configured to, detect an activation of a communication process in the network based on a power-on process or an activation of a specific application, and generating and transmitting an access control list registration processing request packet storing own MAC address in header information by using the detected information as a trigger; and

[[the]] a server [[is]] configured to receive the access control registration processing request packet from the client through the network, confirm whether or not there is an empty slot in a MAC list, the MAC list being composed of a pre-determined number of slots that

define a corresponding predetermined number of clients that are granted permission to access the information processing apparatus, which sets information including a MAC address of one client as registration data for one slot, ~~[[and]]~~ execute a registration process of registering client information based on the packet in the MAC list, only if there is the empty slot in the MAC list.

Claim 14 (Currently Amended): The client server system according to claim 13, ~~characterized in that:~~ wherein

the server is configured to execute a process of acquiring a sender MAC address contained in a header ~~[[filed]]~~ field on a packet received from the client and adopt the acquired sender MAC address as registration information for the MAC list.

Claim 15 (Currently Amended): An information processing method of ~~executing a process of~~ generating an access control list in a router, ~~characterized by~~ comprising:

~~a reception step of~~ connecting, with a connecting unit in the router, to a network to which a plurality of devices are connected, ~~and;~~

receiving, with a receiving unit in the router, a packet from a client that serves as an access requesting apparatus;

~~a registration permission judgment step of~~ judging, with a judgment unit in the router, whether or not there is an empty slot in a MAC list in which information of a MAC list for one client is set as registration data for one slot, the MAC list being composed of a predetermined number of slots that define a corresponding predetermined number of clients that are granted permission to access the router; and

~~a registration processing step of~~ acquiring, with an acquiring unit in the router, data containing a client MAC address from the received packet and executing a registration

process for the MAC list, in accordance with ~~a judgment at the registration permission judgment step that there is the empty slot~~ the judging only if there is the empty slot in the MAC list.

Claim 16 (Currently Amended): The information processing method according to claim 15, ~~characterized in that~~ further comprising:

~~the registration processing step execute a process of acquiring, with the acquiring unit in the router,~~ a sender MAC address contained in a header field of the packet received from the client, and adopting the acquired sender MAC address as registration information of the MAC list.

Claim 17 (Currently Amended): The information processing method according to claim 15, ~~characterized by~~ further comprising:

~~a packet analysis step of judging, with the judging unit in the router,~~ whether the packet received from the client is a registration processing request packet or a data processing request packet[[; and]] wherein

~~characterized in that:~~

if [[it is]] judged ~~at the packet analysis step~~ that the packet received from the client is the registration processing request packet, ~~the registration permission judgment step executes~~ executing a registration permission judgment process in accordance with a presence/absence detection process for the empty slot in the MAC address.

Claim 18 (Currently Amended): The information processing method according to claim 15, ~~characterized in that:~~ wherein

if the packet received from the client is the data processing packet, ~~the registration permission judgment step executes~~ executing the registration permission judgment process in accordance with the presence/absence detection process for the empty slot in the MAC address; and ~~the registration processing unit step executes~~ executing the registration process for the MAC list in accordance with the judgment of the registration permission by the registration permission judgment unit, by acquiring the data containing the client MAC address from the received data processing request packet.

Claim 19 (Currently Amended): The information processing method according to claim 15, ~~characterized by~~ further comprising:

~~a control step of executing, with an executing unit in the router,~~ a close process for the empty slot under a condition that a lapse time from a setting process for the empty slot in the MAC list exceeds a predetermined threshold time.

Claim 20 (Currently Amended): The information processing method according to claim 15, ~~characterized in that~~ further comprising:

~~the registration permission judgment step includes a step of judging, with the judging unit in the router,~~ whether or not a data processing request sequence from the client correctly and reliably executes a sequence in conformity with a UPnP protocol; and

~~the registration processing step executes~~ executing, with an executing unit in the router, the registration process for the MAC list by acquiring the data containing the client MAC address from the packet received from the client in accordance with a judgment that the data processing request sequence from the client correctly and reliably executes the sequence in conformity with a UPnP protocol.

Claim 21 (Currently Amended): The information processing method according to claim 15, ~~characterized in that~~ further comprising:

~~the registration permission judgment step includes a step of judging, with the judging unit in the router,~~ whether a content directory service (CDS) request process in the sequence in conformity with the UPnP protocol is executed or not in response to a data processing request from the client; and

~~the registration processing step executes~~ executing, with an executing unit in the router, the registration process for the MAC list in accordance with a judgment that the content directory service (CDS) request process is executed, by acquiring the data containing the client MAC address from the packet received from the client.

Claim 22 (Currently Amended): The information processing method according to claim 15, ~~characterized in that~~ further comprising:

~~the registration processing step executes~~ executing, with an executing unit in the router, the registration process for the MAC list by acquiring the MAC address and identification information different from the MAC address stored in the packet received from the client.

Claim 23 (Currently Amended): The information processing method according to claim 22, ~~characterized in that:~~ wherein

the identification information different from the MAC address is identification information of global unique ID information or key information set to a client apparatus.

Claim 24-26 (Canceled).

Claim 27 (Currently Amended): ~~A computer program for executing a process of generating an access control list, characterized by~~ A computer-readable storage medium encoded with instructions, which when executed configure a router to generate an access control list method comprising:

~~a reception step of connecting, with a connecting unit in the router, to a network to which a plurality of devices are connected, and receiving a packet from a client that serves as an access requesting apparatus;~~

~~a registration permission judgment step of judging, with a judging unit in the router, whether or not there is an empty slot in a MAC list, the MAC list being composed of a predetermined number of slots that define a corresponding predetermined number of clients that are granted permission to access the information processing apparatus, in which information of a MAC list for one client is set as registration data for one slot; and~~

~~a registration processing step of acquiring, with an acquiring unit in the router, data containing a client MAC address from the received packet and executing a registration process for the MAC list, in accordance with a judgment at the registration permission judgment step that there is the empty slot~~ the judging, only if there is the empty slot in the MAC list.

Claim 28 (Canceled).